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[54] ROBOT CONTROL METHODS AND APPARATUS**[75] Inventors:** Takayuki Fujikawa, Kanagawa; Masahiro Fujita, Saitama, both of Japan**[73] Assignee:** Sony Corporation, Japan**[21] Appl. No.:** 730,934**[22] Filed:** Oct. 16, 1996**[30] Foreign Application Priority Data**

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[51] Int. Cl.⁶ G05B 11/32; G05B 19/42**[52] U.S. Cl.** 395/80; 395/93; 395/85; 395/670; 395/672; 395/673; 395/674**[58] Field of Search** 395/85, 670, 672, 395/673, 674**[56] References Cited****U.S. PATENT DOCUMENTS**

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A robot control method for controlling the operation of a robot so as to pass through a plurality of states corresponding to a predetermined operation, comprising determining at least one operational arc between two directly passable states among the plurality of states showing the operation of the robot when passing between the two states, giving to each of the determined operational arcs a weighting coefficient corresponding to the probability of that operational arc being selected, selecting on a probable basis one of the operational arcs between the two states when making the operation of the robot pass between the two states based on the weighting coefficients of the operational arcs between the two states, and controlling the robot so as to perform the operation shown by the selected operational arc when making the operation of the robot pass between the two states.

5 Claims, 8 Drawing Sheets

